# Waste Management Project D. E. McKenney, Acting Project Director/ (509) 373-0402



Completed transfer of the 242-A Evaporator to CH2M HILL Hanford Group, Inc. on May 26, 2003



#### INTRODUCTION

The Waste Management Project consists of Project Baseline Summary (PBS) RL-CP02, 200 Area Materials and Waste Management, except for the Environmental Restoration Disposal Facility (ERDF), which is work scope managed by another Site contractor.

NOTE: Unless otherwise noted, all information contained herein is as of the end of May 2003.

#### **NOTABLE ACCOMPLISHMENTS**

**Transuranic (TRU) Waste Retrieval:** The Drum Venting System contractor's preliminary design review was successfully completed with minimal changes and no impacts to cost or schedule. The contractor received the custom-built trailer that the drum venting equipment will be located in; other long-lead equipment has been ordered. Non-destructive assay (NDA) training and qualifications have been completed for the minimal crew size required to initiate operations. Additional Nuclear Chemical Operator and Operations leads have been obtained to support startup staffing levels.

**Mixed Low Level Waste (MLLW) Treatment:** Completed seven shipments totaling 113 cubic meters (m³) of MLLW debris and radioactive lead solids to ATG, Inc. (ATG). Received five MLLW shipments totaling 47 m³ (72 m³ pre-treatment volume) of macroencapsulated debris and radioactive lead solids from ATG.

**Liquid Waste Processing:** Operation of the 242-A Evaporator transitioned to CH2M HILL Hanford Group, Inc. on May 26, 2003. A contract is in place for FH to provide technical and operational support through June 30, 2003. The 200 Area Effluent Treatment Facility treated 3.1 million gallons of ground water in May. The 300 Area Treated Effluent Disposal Facility treated and disposed of 3.5 million gallons of industrial waste water, supporting cleanout of several 300 Area facilities.

### FY 2003 SCHEDULE/COST PERFORMANCE (\$000)

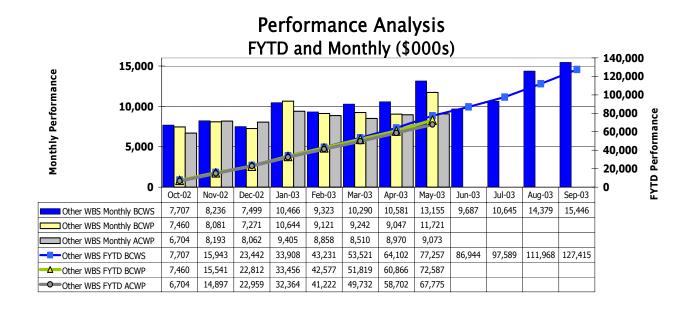
	Budgeted Cost of Work Scheduled	Budgeted Cost of Work Performed	Actual Cost of Work Performed	Schedule	Schedule Variance %	Cost Variance \$	Cost Variance %	Budget At Completion
RL-CP02 <b>200 Area Materials &amp; Waste Mgm't</b>	77,257	72,587	67,775	-4,670	-6%	4,812	7%	127,415

**Schedule Performance:** The -\$4,670K unfavorable schedule variance is primarily the result of the T Plant roof repair and selected upgrades being put on hold to accommodate the FY 2003 congressional funding reductions. The scope will be deferred to FY 2004 and FY 2005 upon approval of the funds reduction Baseline Change Request. The TRU retrieval drum vent system procurement, development of readiness documentation affidavits, and procedure development are slightly behind schedule. The drum vent system contract has been awarded, contract staff have been hired to recover the schedule for readiness documentation, and procedures are awaiting the Master Documented Safety Analysis/Safety Evaluation Report approval. The 183-H disposal to ERDF is behind schedule due to the Engineering Evaluation/Cost Analysis decision; however, it is expected to be approved in June with shipping starting in early July.

#### FY 2003 SCHEDULE/COST PERFORMANCE, CONTINUED

**Cost Performance:** The \$4,812K favorable cost variance is primarily the result of labor ramp-ups that have not occurred as planned (for Waste Isolation Pilot Plant Certification and Shipments, TRU Retrieval, MLLW treatment, Program Management and Solid Waste Storage and Disposal). An under-run to plan was caused by FY 2002 and FY 2003 fee adjustments. Cost efficiencies have been achieved in 200 Area Liquid Effluents and Program Management. The favorable variance will be utilized for the FY 2003 Congressional funding reductions and to offset over-runs for the sludge receipt and other FH projects.

The favorable variance is offset by unfavorable variances in the Solid Waste Pool where waste volumes have been lower than planned for on-site and off-site, resulting in revenues being less than planned. Volumes are expected to pick up in the last four months of the year, and changes to the rates have been proposed to RL to offset the variance. Sludge receipt costs have been higher than planned because of the cost to recover from the crane incident in January and readiness assessment preparation.



#### **MILESTONE ACHIEVEMENT**

Number	Milestone Title	Туре	Due Date	Forecast Date	Status / Comment
M-91-20	T Plant ready to rec. canister of K Basin floor pit sludge	Tri-Party Agreement (TPA) Enforceable	12-31-02	06-13-03	Readiness to Proceed memo drafted and transmitted to RL
M-91-22	T Plant ready to rec. Canister & fuel wash sludge from K Basin	TPA Enforceable	02-29-04	02-29-04	On schedule
M-26-07A	Submit Evaluation of Status of Development of Tritium Treatment Technology	TPA Enforceable	03-31-04	03-31-04	On schedule
M-26-01M	Submit annual Hanford Land disposal restrictions report forecast	TPA Enforceable	04-30-03	04-10-03	Complete 4-10- 03; source system not updated until 6-23-03
M-91-07	Complete W-113 for Post 1970 CH TRU / TRUM Retrieval	TPA Enforceable	09-30-04	TBD	TPA renegotiation ongoing
M-91-12A	Treat 240 Cubic Meters by 12/31/2002	TPA Enforceable	12-31-04	TBD	Letter of completion drafted.

## FY 2003 FH FUNDS VS. FORECAST (\$000)

	Funding Guidance 2003		Spend Forecast	Variance	
CP02 Waste Management	\$	111,350	\$ 112,466	\$	(1,116)
Project Completion - Operating	\$	111,350	\$ 112,466	\$	(1,116)

#### **ISSUES**

**Receipt of Administrative Order on Washington Hazardous Waste Management Act and Dangerous Waste Regulation:** Significant acceleration of retrieval, designation, treatment and certification of MLLW and TRU waste is required. A stay request for section IIC(ii) expires on June 13, 2003. Other operations will be curtailed if an additional stay or other action is not granted. DOE filed an appeal to the Order on May 29, 2003, to the Pollution Control Hearings Board; however, terms of the Order remain in effect and are difficult, if not impossible, to meet based on current and planned waste retrieval, designation, treatment and certification capabilities for MLLW and TRU waste. Significant impacts include additional funding above the current baseline to execute new work scope and risk of being subject to enforcement by Ecology if the terms are not met.

**T Plant Readiness to Receive K Basin Sludge:** Readiness Assessment was completed April 23, 2003. Washington State Department of Health states in a June 2, 2003, letter to RL that "T Plant is approved to operate as a major stack." Readiness-To-Receive-Authorization from RL (requested by May 30, 2003) has not been received.

**TRU Program Acceleration:** Increase production rates for TRU waste certification and shipment to the Waste Isolation Pilot Plant (WIPP).

- Add bargaining unit resources at the Waste Receiving and Processing Facility to allow parallel TRU characterization efforts. Fifteen of 34 bargaining unit positions have been filled. Planning is on-going for adding the remaining 19 individuals this summer.
- Augment Headspace Gas analytical capability through use of the Idaho National Environmental and Engineering Laboratory. Procedure changes and implementation are expected to be in place by the end of July 2003.
- Certify the Sand Slag and Crucible (SS&C) waste stream and start shipments to WIPP in May 2003.
   The Waste Stream Profile Form was approved on schedule by the Carlsbad Area Field Office and the first SS&C shipment was completed on May 27, 2003. Three shipments were successfully completed in May 2003, and the remaining seven shipments are scheduled for June and July 2003.
- Accelerated Process Line implementation: The NDA unit has arrived on site, and FH plans to accept the Non-destructive Examination unit in early June. Both units are being temporarily located outside the 2403 building at the Central Waste Complex until the modifications at 2404W-C are complete later this summer. RL has verbally indicated that FH can process drums through these units as part of their certification effort under the existing National Environmental Policy Act Categorical Exclusion. This still needs to be formally documented. The assay units have arrived and the x-ray units are scheduled to arrive in early June 2003.
- Implement solids sampling at PFP: Procedures and training need to be put in place in time for the June 16, 2003, audit. This effort is necessary to complete the characterization of existing (Hanford ash) and future S3000 Pipe Over-pack Containers generated by PFP. The sampling procedure has been drafted and the sampling equipment is in the procurement process.

**Buried TRU Drum Retrieval:** Initiate TRU drum retrieval by September 2003.

- The latest RL prediction of approval of Documented Safety Analysis is early June. Safety Evaluation Report implementation is on the project critical path.
- Approval to allocate personnel/resources to project: Staffing plan approved and hiring is proceeding. Bargaining unit positions are back on hold due to the Spent Nuclear Fuel Project acceleration.
- Mobilize drum venting equipment/integrated demonstration by August 2003.
- Complete regulator negotiations and issue non-TRU waste interim storage plan (on hold pending outcome of Tri Party Agreement milestone M-91 litigation).
- Start Readiness Assessment (RA) contractor review by August 2003.
- Final DOE RA approval/startup initiated by September 2003.